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BUILDING 776/777 CLUSTER CLOSURE PROJECT

Health and Safety Plan

Developed by
Rocky Mountain Remediation Services, L L C

Revision 0

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BUILDING 776/777 CLUSTER DECOMMISSIONING PROJECT
HEALTH AND SAFETY PLAN

Revision 0
December 1999

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ACRONYMS

AB	Authorization Basis
ACM	Asbestos Containing Material
AHERA	Asbestos Hazard Emergency Response Act
AHA	Activity Hazard Analysis
ALARA	As Low as Reasonably Achievable
Be	Beryllium
CFR	Code of Federal Regulations
D&D	Decontamination and Decommissioning
DOE	US Department of Energy
ESH&Q	Environmental Safety Health and Quality
EWP	Enhanced Work Planning
FBI	Fluid Bed Incinerator
HASP	Health and Safety Plan
HSP	Health and Safety Practices
IH&S	Industrial Hygiene and Safety
ISM	Integrated Safety Management
IWCP	Integrated Work Control Program
JCO	Justification for Continuing Operations
JHA	Job Hazard Analysis
LCO	Limiting Condition of Operation
LO/TO	Lockout/Tagout
LS/DW	Life Safety/Disaster Warning
MAP	Management Assessment Program
OS&IHPM	Occupational Safety & Industrial Hygiene Program Manual
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyl
PM	Project Manager
PPE	Personal Protective Equipment
PHA	Preliminary Hazards Analysis
RCM	Radiological Control Manual
RCT	Radiological Control Technician
RFETS	Rocky Flats Environmental Technology Site
RMRS	Rocky Mountain Remediation Services, L L C
RWP	Radiological Work Permit

TRU	Transuranic
TSR	Technical Safety Requirement
USQ	Unreviewed Safety Question
USQD	Unreviewed Safety Question Determination

1 0 GENERAL INFORMATION

1 1 Purpose and Applicability

The purpose of this Health and Safety Plan (HASP) is to identify, mitigate, and control/eliminate potential safety, health, and environmental hazards associated with decommissioning activities in the following buildings 701, 702, 703, 710, 712, 712A, 713, 713A, 730, 776, 777, and 781 Procedures and controls will be identified in this HASP that will help prevent and reduce the risk of personnel injury and/or illness and property and/or environmental damage/impacts

All Project personnel and subcontractors will utilize the following documents to govern health and safety of the worker during the decommissioning process

- Building 776/777 Closure Project Health and Safety Plan,
- Subcontractor Safety Plans,
- US Department of Energy (DOE) Orders 5480 9a (to be replaced by 440 1),
- DOE Hoisting and Rigging Manual,
- DOE construction Manual,
- DOE Handbook for Occupational Health and Safety During Hazardous Waste Activities, as the upper tier documents to govern health and safety of the workers during the decommissioning process,
- Occupational Safety and Health Act (OSHA) Standards 29 Code of Federal Regulations (CFR) 1910 and 1926 will be utilized in conjunction with other approval company and subtier-specific documents (such as applicable Health and Safety Practices Manual or Occupational Safety and Industrial Hygiene Program Manual procedures)
- DOE Radiological Control Manual (RCM), 10 CFR 835 and the RFETS-specific RCM (Site RCM) will be utilized for worker radiological safety

Walkdowns or general work tasks such as Limiting Conditions for Operations (LCO), non-LCO surveillance and other tasks as designated by the Project Safety Officer do not require a Job Hazard Identification Tool (JHIT) checklist and Job Hazards Analysis (JHA) form to be completed All other tasks require a JHIT and a JHA to be completed and approved The JHA will identify the principal steps involved and the sequence of work activities, the potential safety and health hazards associated with each step, the specific controls associated with each potential hazard, the task-specific special equipment to be used in performing the activity, and monitoring

1 2 Project Description

The scope of the project consists of the removal of numerous components, associated equipment, and building structure materials in 12 buildings, which contain the following type of materials

- Lead-lined gloveboxes,
- Non lead-lined gloveboxes,
- All associated utilities,
- Piping, valves, panels and other structural components
- Ventilation ducting and hoods,
- Miscellaneous containers, furnaces, tool boxes, and drums

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- Any other items or components to allow total decommissioning of the rooms This can include characterization activities, decontamination of equipment and building structures, draining and decontamination of piping, removal of concrete structures, ceiling tiles, framing, filters, room bracing, etc

This project will result in the generation of hazardous, mixed, low-level waste, industrial, and transuranic (TRU) wastes as described in the Project's Waste Management Plan The Project has conducted a Reconnaissance Level Characterization that identified hazardous, chemical, and radiological contaminants in the various rooms and structures As equipment is being removed from these rooms and structures, additional characterization surveys will be performed as required The determination to perform additional surveys will be based on work package development needs and specific findings as work is performed (e g , performing further Beryllium surveys as equipment is removed from a room in which Beryllium was known to have existed)

Activities covered by the HSP include, but are not limited to the following activities

- Sampling, characterization, and removal of chemical, hazardous, combustible, and radiological materials and waste, including special nuclear materials (SNM) holdup
- Isolation and containment of gloveboxes, tanks, and building support systems This includes isolation of plumbing, electrical ventilation and equipment and system alarms
- Dismantlement and size-reduction of gloveboxes, tanks, equipment, and piping
- Decommissioning planning and engineering activities such work package preparation and procurement of long-lead time items

2 0 HEALTH AND SAFETY STRATEGY

The safety and health of personnel, the public and the environment is the primary concern in the conduct of the Building 776/777 Closure Project Project Management will take all required precautions to ensure that work activities are carried out in a manner that facilitates a safe and healthful working environment Health and safety strategies are discussed in detail in the following sections

2 1 Authorization Basis Strategy

AB Documentation currently addresses decommissioning activities as outlined in Section 1 0 The AB will be modified as necessary to address changes in the project work scope

2 1 1 Reduction of Controls

The authorization Basis contains tailored safety management programs that are required to protect project personnel and the environment, and will cover major areas such as Configuration Control, Quality Assurance, Conduct of Operations, Radiological Control, etc The AB will allow for a graded approach to safety controls through the following methods

- Limiting Conditions of Operations (LCOs) with applicability statements, or other appropriate permissives to allow controls to be eliminated as the hazard is eliminated
- Where possible, the safety basis will rely on Site infrastructure programs that utilize a graded approach so that when the hazard is eliminated, the control is eliminated For

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example, as contamination areas are decontaminated, the surveys and controls required by the Radiation Control Program will be eliminated as well

- In instances where controls are not explicitly addressed by detailed applicability statements, exceptions, or permissives, the Technical Safety Requirement (TSR) page change would be utilized to revise (delete/reduce) the required control as hazards are eliminated The Justification for Continued Operations (JCO) process could also be used to address non-compliance with the required controls

At some point in the facility closure, it is expected that the Authorization Basis will contain only the program controls necessary to protect the worker against normal industrial hazards in a radiological facility Because of the low amounts of Plutonium necessary to recategorize Category II nuclear facilities to Category III nuclear facilities, or recategorize Category III nuclear facilities to a radiological facility status, it would be extremely difficult to change status until late in the closure process However, with few or no nuclear facility controls (e g , LCOs), there would be little efficiency gained through category changes, since the controls would have already been eliminated and cost savings are minimal

2 1 2 Evaluation of New Activities/Hazards

Closure activities not specifically addressed by the AB will be evaluated against that envelope using the Unreviewed Safety Question (USQ) process The AB controls suite will be adjusted as respective hazards are reduced or new ones introduced The AB safety envelope may require adjustment (via the USQ or the annual AB update process) with RFFO concurrence as configuration of the facility is changed, new activities are planned, or new hazards are identified Trained workers will perform the work using defined safety controls and programs Reviews, and authorization to proceed with activities will ensure recognition of the AB safety envelope The nature of closure activities requires continuous reviews and feedback to verify proper hazard identification and operational controls Through these reviews, process improvements are expected The facility maintains the current approved safety basis for the Building 776/777

2.2 Criticality Safety

Building 766/777 currently has full criticality detector coverage for rooms/areas requiring coverage Then, as criticality risks are reduced, an evaluation will be preformed to evaluate the quantity, location, and form of fissile material within the facility, along with the nature of the activities to be performed Based on this evaluation, engineering judgement and calculations will be sued to determine the feasibility of a criticality incident When enough material has been removed to determine that the potential for a criticality is not credible, the system will be taken out of service Communications with employees (i e , via All Hands briefings, pre-evolution briefings, etc) will be a crucial component of these changes within the facility

2 3 Overview of Hazards

Hazards associated with the Building 776/777 Complex include chemical, radiological and industrial hazards These hazards are considered in more detail in the following sections

2 3 1 Chemical and Radiological Hazards

A reconnaissance level characterization of the Building 776/777 Complex was conducted during FY98 This characterization identified the following hazards are present in the building complex radiological, asbestos, lead and other heavy metals, beryllium, and chemicals The locations of the hazards within this Complex are listed in Table 1 Details regarding the form

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and extent of contamination are presented in the Reconnaissance Level Characterization Report (Reference 1), a summary of the hazards is presented in the following section of this plan

Radiological Hazards Radiological hazards are present in Building 776/777 and Building 730 Building 776/777 radiological contamination is the result of a 1969 plutonium fire and from process operations Radiological contamination can be found in the following areas (1) building structure-floors, walls, ceiling, and the original roof, (2) production equipment such as gloveboxes and tanks, (3) process piping, (4) electrical conduit and panels, (5) ventilation systems, and (6) the ground underneath the building Building 730 radiological contamination is a result of process operations)

Asbestos Hazards Asbestos-containing materials (ACM) have been found in Buildings 776/777, 701, 702, 703, 710, 712, and 713 A complete building survey for ACM in Buildings 776/777 has not been completed, but will be completed prior to building demolition in accordance with the applicable regulatory requirements ACM may be found in the following areas office area floor tiles, original building walls and some interior walls, black tar on the roof, roof structural steel beams are encased in asbestos, piping insulation on the first and second floors, and equipment isolation There is potential for ACM to be present in the following areas insulation inside cement blocks and in other equipment insulation, piping insulation, ceiling tile, and floor tiles other than those already known to contain asbestos

In the remaining buildings, piping insulation and equipment are known to contain ACM or there is a potential for them to contain ACM

Lead and Other Heavy Metals Lead and/or other heavy metals have been used in Buildings 776/777, 701, 702, 710, 712, 712A, and 713B In Building 776/777 lead can be found throughout the building in the following items lead aprons, lead tape, leaded glass, solder in printed circuit boards, lead shielding on equipment and walls, leaded gloves, sludge in Kathabar units and incandescent lights Lead is potentially present in paint

Other heavy metals can be found throughout Buildings 776/777 Mercury is present in sodium vapor lights, fluorescent lights, thermometers, switches, incandescent lights, magnahelics, and other instrumentation Barium is present in leaded glass and TK1103 sludge Chromium is present in the Fluid Bed Incinerator (FBI) equipment, FBI oils, TK1103 sludge, and Kathabar sludge Cadmium may be present in Kathabar unit sludge and in FBI oil Silver may be present in TK1103 sludge Other heavy metals in addition to lead may be present in paint

Polychlorinated Biphenyls (PCBs) PCBs have been detected in Buildings 776/777, 701 and 712 In Building 776/777 potential sources of PCBs include ballasts in fluorescent light fixtures, capacitors, electrical transformers, oils, and chlorinated solvents There is a possibility that paint used throughout the facility may contain PCBs The other buildings may contain PCBs in fluorescent light fixtures

Beryllium The baseline Beryllium surface contamination survey has been completed in Buildings 776/777 Beryllium contamination has been detected in areas of Building 776/777 where beryllium machining operations were conducted Further characterization will be required prior to building D&D and to assess elevated surfaces

Chemicals Building 776/777 has piping and equipment that formerly contained Freon, trichlorethane, machine oil, methanol, lithium chloride, and carbon tetrachloride These liquids will be drained from equipment before decommissioning activities begin As a result of the Waste Chemical Program, waste chemicals will be removed from all buildings during deactivation The exception to this are excluded chemicals and chemicals that will be used for D&D

Table 1
Summary of Hazards and Contaminants in Building 776/777 Complex

Bldg	Radiological	Asbestos	Lead/Heavy Metals	PCBs	Beryllium	Chemicals
776/777	X	X	X	X	X	X
701	X	X	X	X		X
702		X	X			X
703		X				
710		X	X	X		
712		X	X			
713		X				
712a			X			
713A			X			
730	X					
781			X			X

2 3 2 Physical Hazards

Physical hazards associated with the Building 776/777 Closure Project are typical of industrial and construction settings These hazards include, but are not limited to

- Slips, trips and falls, due to slippery work surfaces, piping, lines, etc in the work area,
- Hazardous energy and sources in the form of electricity, rotating parts, mechanical equipment, and hydraulic pressure,
- Exposures due to unintentional releases of hazardous substances,
- Electrical shock from the use of electrical powered equipment and connecting electrical lines,
- Confined space entry,
- Exposure to ionizing radiation,
- Excessive noise levels,
- Injuries resulting from using hand-held equipment like saws, drills, etc ,
- Compressed gasses,
- Heat stress,
- Biohazards,
- Heavy Equipment,
- Hoisting and rigging, and
- Pinch points

Other physical hazards include temperature stress, ladder usage, crushing hazards, fall protection hazards, elevator work, and illumination related hazards These hazards shall all be evaluated and controlled in accordance with MAN-072-OS&IH PM, Occupational Safety and Industrial Hygiene Program Manual, and OSHA Standards

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2 4 Characterization Overview

As part of the Health and Safety Program, site characterization and analysis is currently being performed and will continue to be performed throughout the D&D process of 776/777 Four major areas are continually being reviewed and characterized, which includes asbestos, beryllium, lead and radiological conditions As other materials or hazards are encountered during the D&D process, they will be characterized accordingly

2 4 1 Asbestos

The Building 776/777 Cluster has not been inspected for the presence of asbestos containing materials (ACM) An asbestos inspection conducted in accordance to the guidelines set forth by the Asbestos Hazard Emergency Response Act (AHERA), and compliance with Occupational Safety and Health Administration (OSHA) and the State of Colorado regulations (Regulatory Guide 8) covering asbestos inspections shall be performed prior to building demolition

2 4 2 Beryllium

A baseline characterization survey has been conducted in Buildings 776/777 for the presence of beryllium Additional beryllium samples will be taken as necessary and in accordance with the RFETS Chronic Beryllium Disease Prevention Program to support D&D activities

2 4 3 Lead

Lead contaminated areas will be remediated in accordance with 29 CFR 1926 62, which is the lead construction standard Work activities in lead suspect or lead contaminated areas will be performed in accordance with the project-specific lead compliance plan(s)

2 4 4 Radiological Conditions

Radiological surveys in the Building 776/777 Cluster will be a continuous and on-going process Suspect and non-suspect areas will be surveyed to confirm past historical results Process knowledge and routine surveillance surveys will continue to be performed throughout the D&D process

In addition to designated characterization surveys, individual work tasks will require specific radiological surveys All work activities involving radiological hazards will be governed by a radiological work permit (RWP) with current survey data

2 5 Worker Safety

Worker involvement is also a key consideration and significant lessons learned from other DOE facilities Worker involvement and a graded approach to the levels of safety analysis required for various deactivation tasks are keys to making the safety analysis process useful, efficient, and satisfactory to all concerned The graded approach is cost effective in that it does not demand a high level of analysis for simple jobs already covered in established procedures

Worker involvement is also cost-effective in that it provides a higher level of assurance that workers are participating willingly and without hesitation in the jobs that are required for facility deactivation

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Safety will be enhanced through the implementation of several key programs

- Management Leadership and Employee Participation
  - Establishment of Lessons Learned Program, Management Safety Walkdowns, Safety Meetings, Employee Recognition
- Workplace Analysis
  - Development of Activity Hazard Analyses, Safety Inspections
- Accident and Record Analysis
  - Accident Investigations, Tracking and Trending of safety data
- Hazard Prevention and Control
  - Evaluation of work areas, Activity Hazard Analyses, implement controls
- Emergency Response
  - Conduct drills/exercises, reinforce proper response to emergencies
- Safety and Health Training

2 5 1 Enhanced Work Planning

Enhanced Work Planning (EWP) is the natural implementing vehicle to involve workers, and to incorporate the five key elements of the Defense Nuclear Facility Safety Board recommendation 95-2 The key elements encompass the essence of an effective, efficient, and safety conscience work process (1) work scope reviewed and prioritized, (2) work scope analyzed for hazards and categorized based on risk, (3) controls established based on hazards, (4) risk and experience of workers, and (5) work performed safely, efficiently, with appropriate degree of supervision, and continuous improvement and lessons learned EWP also serves as a tool to implement the Integrated Safety Management (ISM) process The ISM process integrates safety into management and work practices at all levels

The RFETS Enhanced Work Planning program is designed to provide a safer, more efficient work environment by

- Encouraging worker participation in the initial work planning process to enhance the effectiveness of safety and work efficiency
- Ensuring hazard analysis and controls are appropriate for the job
- Improving worker knowledge of safety requirements
- Fostering teamwork between hourly and salary personnel
- Improving the technical accuracy and workability of work packages
- Balancing the degree of work instruction, skill-of-craft, and worksite supervision
- Reducing the overall time to plan, review, and approve work packages
- Promoting realistic resource-loaded schedules
- Enhancing job coordination and improving the efficient execution of the work
- Continuous improvement through real-time feedback

Enhanced Work Planning considers the entire work process and continually asks the questions necessary to implement a safer, more efficient work control process However, in the traditional approach to the work control process, technical specialists, management, and workers are given work packages for review during various phases of the work planning process When changes are made by one or more of the reviewers, the package must be reviewed again by all parties This sequential review process is inefficient and tends to create conflict between

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planners, reviewers, and workers Enhanced Work Planning is designed to improve the traditional work control process, primarily through extensive communication and feedback from the appropriate mix of personnel responsible for the work

2 6 Integrated Safety Management (ISM)

Each of the above subsections combine and work together to form the Integrated Safety Management process which is essential for safe operations at RFETS This process establishes a single defined safety and environmental management system that integrates standards and requirements into the work planning and execution processes to effectively protect the public, worker, and the environment K-H and its subcontractors are committed to using a single integrated system to perform all work safely at the site This integrated system combines a diverse group of people and risk graded infrastructure programs to satisfy the multiple safety environmental and health needs uniformly Figure 2-1 identifies the flowchart for implementation of the Integrated Safety Management Process

Therefore the health and safety strategy consists of the following An integrated safety management process will be implemented that is structured around five core principles

(1) Define the scope of work,
(2) Analyze hazards,
(3) Develop and implement controls, (
(4) Perform work within controls, and
(5) Provide feedback and

The process will facilitate work by identifying key hazards up front and incorporating risk management into the job planning process

Integrated Safety Management

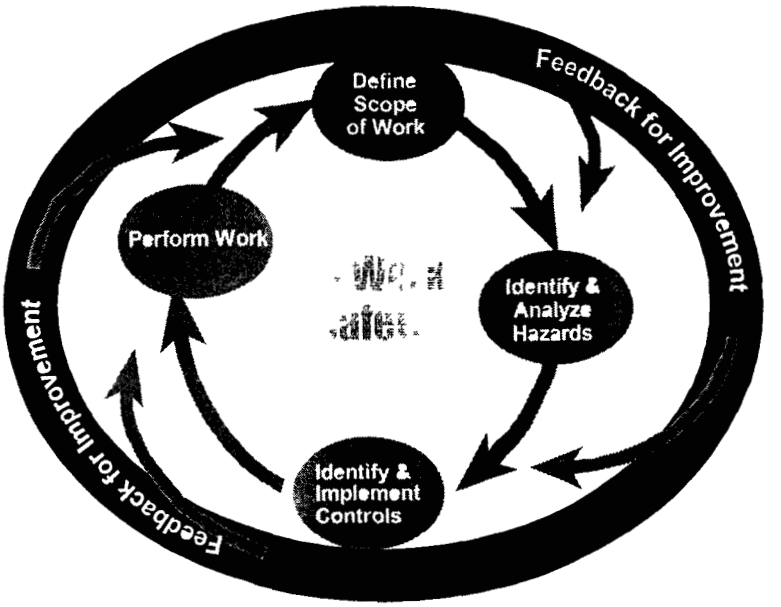


FIGURE 2-1

As discussed in the previous section, a key to ensuring effective integration of safety systems is use of Enhanced Work Planning With this approach, work teams consisting of D&D workers, RCTs, and other crafts as needed, are assigned to rooms or areas within the Building 776/777 Cluster They work with the engineers and planners, through walkdowns and round-tables, to ensure the IWCP work packages provide the instructions and hazards controls they need to safety perform the work Tools to assist the teams in this work planning include the JHA, combined with building characterization information The team planning the work then ultimately executes the work Their prior involvement ensures their understanding of the work scope, the hazards and limitations of the work, and the controls required to ensure safe and proper performance of the work

Using Figure 2-1, the Enhanced Work Planning process allows the work team to help define the scope of the work, and help identify the hazards that will be encountered and identify the controls needed, primarily through the JHA The work team can then conduct the work activity in a safe and effective manner, due to their intimate involvement in the planning effort Throughout this entire process, the team concept ensures feedback to planners, engineers, technical support personnel and management to ensure the next work activity can be performed more safely and efficiently

2 7 Preliminary Hazard Analysis

During the initial planning stages for the D&D of 776/777, a Preliminary Hazard Analysis Overview was conducted in accordance with OS&IH PM Chapter 45, *"Construction Specific Safety Requirements"*, to evaluate the potential health and safety hazards for the project This PHA includes an evaluation of the types of hazards associated with each phase of the project Potential health hazards may include lead, asbestos, radioactive materials, beryllium, acids or other hazardous materials, and/ or chemicals Other potential hazards may include hoisting and rigging, scaffolding usage, LO/TO concerns, fall protection issues and confined space entries Due to the potential hazardous materials and chemical exposure to the workers, characterization of asbestos, lead, beryllium, acids, PCBs, uranium, plutonium, and radioactive contaminates will be accomplished in accordance with approved Building 776/777 Reconnaissance Level Characterization Report and Site procedures

Table 2-1 Preliminary Hazard Analysis Overview

Major Work Task	Hazard	Cause	Preventative Measures
Perform building walkdowns to identify IWCP work steps	Tripping, falling, exposure to chemicals hazardous substances and/or radioactive materials Also exposure to noise hazards	No planning, lack of communicating between work groups, improper use of RWPs not following room or building instructions	• Develop JHAs • Conduct effective pre- evolution briefings • Follow all building instructions • Ensure all personnel have been properly trained before entry • Adequate RWPs are developed and followed
Move office equipment and furniture to prepare for D&D activities	Back strains pinch points, extremity injuries due to falling objects or moving vehicles	Improper lifting of equipment, careless handling of equipment, improper planning and walkdowns No continuing observations or use of the buddy system	• Proper training conducted and documented • Use of the buddy system • Proper use of forklifts and trucks including operating alarm systems and brakes • Planning meetings and briefings completed • Proper use of JHA • Adequate RWPs are developed and followed

Table 2-1 Preliminary Hazard Analysis Overview (Continued)

Major Work Task	Hazard	Cause	Preventative Measures
Perform hazard analysis characterization activities This includes asbestos, Be, chemical lead and radiological sampling	Overexposure to substances, accidental inhalation of substances, absorption into skin of substances, eye and skin irritation Exposure to radiological contamination	Improper or no use of prescribed PPE, RWP lack of proper planning, not following sampling procedures correctly improper transport or handling of samples	• Follow JHA • Wear prescribed PPE properly • Conduct planning meetings and briefings • Follow RWP • Ensure all required training has been completed
Perform asbestos and lead abatement and clean up activities	Exposure to asbestos airborne and surface contamination fibers that are lung hazards Exposure to lead materials is hazardous to internal organs of the body Exposure to radiological contamination	Improper clean up techniques including improper tent decontamination or PPE usage Improper ventilation usage Improper waste handling and disposal Improper or no use of RWPs	•Obtain the services of a certified state abatement inspector or Certified Industrial Hygienist to plan and supervise the abatement project •Ensure all workers are trained as asbestos workers •Ensure all RFETS asbestos/lead prerequisites are met prior to job commencing •Develop and implement an JHA(s) for the job •Ensure all medical, training and PPE prerequisites are met •Ensure the proper air monitoring sampling is performed during the course of the job by IH&S personnel •Ensure all posting and clearance sampling is performed • Adequate RWP developed and followed
Perform Be decontamination and clean up activities	Exposure to Be contamination in the air or surface which is a lung hazard Exposure to radiological contamination	Improper use of decontamination equipment can cause extremity or limb damage of workers Improper clean up techniques including Improper tent (if reqd) decontamination or PPE usage Improper ventilation usage Improper waste disposal and handling Improper training in the use of decontamination equipment can injure the user and coworkers Improper or no use of RWPs	•Ensure all workers are trained as Be workers •Ensure all RFETS Be prerequisites are met prior to job commencing •Develop and implement a decontamination plan and JHA(s) for the job •Ensure all medical, equipment training and PPE prerequisites are met •Ensure the proper air monitoring sampling is performed during the course of the job by IH&S personnel •Ensure all posting and clearance sampling is performed Adequate RWP developed and followed

Table 2-1 Preliminary Hazard Analysis Overview (Continued)

Major Work Task	Hazard	Cause	Preventive Measures
Perform radiological decontamination of equipment and surfaces using dusting, wiping, scrubbing, vacuuming, non-combustible strippable coatings, non-combustible fixative coatings, scarifiers, paving breakers and chipping hammers, grit blasting, carbon dioxide blasting, and chemical decontamination	Exposure to radioactive materials internally and externally Cell damage and damage to internal body organs can occur with overexposure to radioactive materials Improper use of scabbling or other decontamination equipment can injure extremity or other limbs of workers by causing gash or cutting wounds	Improper tent construction Improper PPE usage Improper ventilation of work area Improper waste disposal and handling No or improper training in the proper use of decontamination equipment No job planning No lockout/tagout of work area No fall protection	•Ensure all workers are trained as rad workers •Ensure all RFETS radiological prerequisites are met prior to job commencing •Develop and implement JHA(s) for the job •Ensure all medical, equipment, training, and PPE prerequisites are met •Ensure the proper air and smear monitoring sampling is performed •Follow the RWP instructions, including ALARA review if required •Conduct mock up training for decontamination operations •Ensure work area is properly ventilated •Ensure LO/TO operations have been performed •Wear prescribed PPE as determined by IH&S and Rad Protection •Utilize fall protection when required
Deenergize work areas and remove cables and wiring	Electrical shock to body, cutting of extremities or body parts using wire strippers or other hand tools, falling off ladder or scaffolding, if used Exposure to radiological contamination	LO/TO not used properly, all workers not informed of LO/TO status Improper use of hand tools, ladders or scaffolding Improper lighting in room can cause improper use of equipment as well Improper or no use of RWPs	•Utilize lockout and tagout procedures properly •Inspect all hand tools before use •Ensure all workers are trained in ladder, scaffolding and fall protection measures before using this equipment •Develop and utilize task specific JHAs •Perform work area walkdown and conduct proper planning meetings and briefings • Ensure all worker training is current • Adequate RWP developed and followed

Table 2-1 Preliminary Hazard Analysis Overview (Continued)

Major Work Task	Hazard	Cause	Preventive Measures
Move equipment out of rooms or area and transport utilizing forklifts, pallet jacks or pick up trucks	Back injuries, pinching, and extremity damage by dropping or falling objects Internal and external body injuries by vehicle impact Eye injuries by poking or dust particles in eye Noise hazards Exposure to radiological contamination	Improper lifting techniques, job flow not planned properly pre-job walkdowns not performed, vehicle alarm systems not working, buddy system not used, lack of attention to detail worker fatigue or no use or improper use of PPE Improper or no use of RWP	•Perform pre job walkdowns •Develop JHAs for job •Use buddy system •Ensure vehicle alarm and braking systems are working properly •Utilize PPE properly •Perform proper lifting techniques •Perform pre job warm up exercises before lifting •Do not attempt to move items that are stacked too high •Cover all sharp edges with taping material • Adequate RWP developed and followed
Cut out piping systems in rooms or work areas	Cutting of body limbs or body parts with mechanical equipment Piping falling on feet pinch points of rolling pipe, liquid splashes if piping is not drained, springing of piping into body when cut Exposure to radiological contamination	Improper use of mechanical equipment including no training of equipment being used, piping not rigged or restrained properly piping not drained prior to cutting Improper or no use of RWP	•Proper training with cutting equipment •Develop and utilize JHA for job tasks •Rig and restrain piping properly •Utilize pipe caps after cutting to keep debris from falling out and cover sharp edges of pipes after cutting •Ensure piping has been properly taken out of service •Utilize proper PPE as described in the JHA and RWP • Adequate RWP/ ALARA review developed and followed
Rig piping and equipment out of rooms	Bodily injuries due to falling objects or pinching of workers due to space limitations Exposure to radiological contamination	No rigging plan improper rigging techniques, improper worker body positioning Improper or no use of RWPs	•Develop rigging plan •Comply with all RFETS standards for rigging • Develop JHA and implement •Perform pre job walkdown and conduct pre-evolution •Walkdown rigging path - all phases •Perform pre and post job inspections on all rigging equipment •Ensure all workers are properly trained • Adequate RWP developed and followed

Table 2-1 Preliminary Hazard Analysis Overview (Continued)

Major Work Task	Hazard	Cause	Preventive Measures
Packaging waste into containers for storage and shipment	Pinching of extremities on container lids barrels rolling on feet back strains, foot injuries as vehicle wheels impact or roll onto extremities, cuts/gashes of hands by tooling Exposure to radiological contamination	Improper lifting and handling techniques wrong tooling used to put lids on containers, pallet jack or forklift ramming into workers, job rushed or not planned properly Improper or no use of RWPs	•Develop JHA and implement •Review lessons learned from previous waste handling operations •Develop proper tool list before starting job •Ensure all waste containers are properly staged before starting job •Ensure all building notifications are made before moving and handling waste •Follow all RFETS requirements for waste handling and movement • Adequate RWP developed and followed
Cut out and remove gloveboxes in rooms or work areas	Pinch points, foot and hand injuries, cutting of hands/arms, eye and head injuries, burning of skin or extremities Exposure to radiological contamination	Improper use of grinders or no guards on grinders, cramped working conditions, bad lighting, limited vision, breaking of leaded glass, plasma slag burns through clothing, improper use of PPE Improper or no use of RWPs	•Proper training with cutting equipment •Develop and utilize JHA for job tasks •Rig and restrain gloveboxes properly •Utilize pipe caps on glovebox piping after cutting •Ensure gloveboxes have been properly taken out of service before work starts •Utilize proper PPE as described in the JHA •Perform tooling inspections before each use • Adequate RWP/ALARA review developed and followed
Construct and utilize scaffolding to perform job tasks	Fall hazards, workers struck by falling objects, hand injuries Exposure to radiological contamination	No use of fall protection, improper training, no use of PPE improper use of tooling, improper rigging and transport of scuffling pieces, no scaffold inspections, scaffold collapse Improper or no use of RWPs	•Proper training for scaffold erection and use •Fall protection and rigging training •Proper use of PPE •Develop JHA •Perform documented scaffolding inspections •Ensure all scaffolding is tagged properly •Ensure all toeboards and siderails are in place • Adequate RWP developed and followed

3 0 Organizational Responsibilities

Figure 3-1 depicts key project positions for the Building 776/777 Closure Project An important feature of this organization is line management responsibility for all aspects of environmental protection, health and safety of the workers and public, as well as facility operations within the requirements of the facility Authorization Basis

3 1 Project Manager

The Closure Project Manager (PM) has overall responsibility for all aspects of the Building 776/777 decommissioning and demolition The PM ensures that federal, state, local and DOE requirements, policies, and procedures are complied with The PM ensures that adequate resources are applied to project tasks in a manner that places safety as the highest priority The PM reports directly to the Kaiser-Hill Vice President of Closure Projects as well as the Rocky Mountain Remediation Services Vice President of Closure Projects

3 2 Project Safety Officer

The Project Safety Officer (PSO) is responsible for development of the HASP and providing technical guidance to the project staff at all levels on matters involving health and safety, industrial hygiene The PSO also performs other duties including but not limited to

- safety audits and inspections
- technical interpretation of OSHA and DOE regulations
- personal air sampling
- accident investigations
- area sampling
- characterization sampling
- Job Hazard Analyses and/or Activity Hazard Analyses – review of
- procedural reviews
- assists with ISM and EWP implementation

The PSO reports directly to the PM

3 2 1 Joint company Union Safety Committee Representative

The Joint Company Union Safety Committee Representative (JCUSCR) for the Building 776/777 Closure Project has been selected to interface with management on all safety concerns which originate from the collective bargaining unit and other Project personnel He/She assists management with resolving issues in a timely manner He/She is selected by the JCUSC with concurrence from management, and deals primarily with safety issues that have direct impact on bargaining unit personnel The JCUSC representative works with the PSO on technical issues and reports directly to the PM

3 3 Radiological Safety Manager

The Radiological Safety Manager (RSM) has authority over all radiological operations during the Building 776/777 Closure The RSM implements the RFETS radiological control programs and has duties including but not limited to

- Performing ALARA reviews
- Developing RWPs
- Reviewing work packages

- Overseeing RCT personnel
- Interpreting radiological regulations
- Overseeing survey and monitoring

The RSM reports directly to the PM

3 4 Integration Manager

The Integration Manager (IM) has been involved in the 776/777 Closure Project since its inception The IM developed all budgets, cost projections, estimates and schedules associated with the initial project plans The IM is responsible for translating these plans into required actions using the Plan of the Day process The IM incorporates input from workers and foremen to revise project plans based on constraints The IM is responsible for project financial transactions including procurement, subcontracting, change orders etc , cost tracking etc The IM also develops regulatory documentation including characterization reports and the DOP The IM reports to the PM

3 5 Work Authorization Team Manager

The Work Authorization Team Manager (WAT) is responsible for the operation and maintenance of the 776/777 complex The WAT ensures that all project tasks are executed in compliance with COOP directives and the Facility AB Other duties include

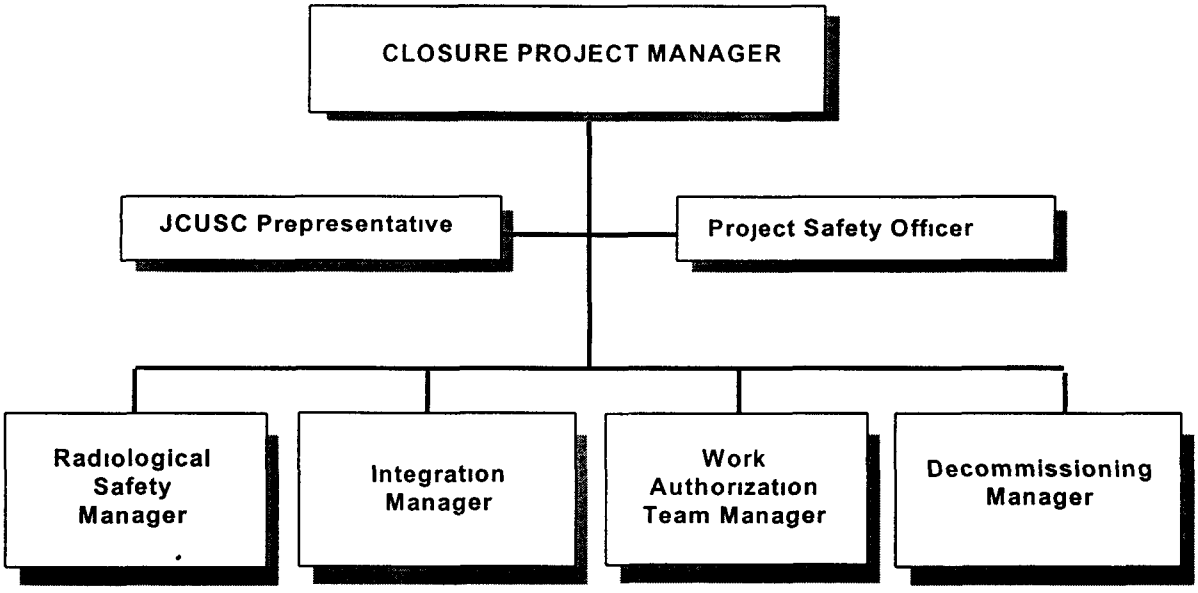
- Releasing work
- Releasing work
- occurrence reporting
- maintenance of vital safety systems
- surveillance's
- interfacing with DOE Facility Representatives
- Plant Action Tracking System

The WAT reports to the PM

3 6 Decommissioning Manager

The Decommissioning Manager (DM) is responsible for executing the tasks necessary to D&D the Building 776/777 Cluster safely This includes supervision of foremen and crews, providing technical advice to procedure writers and engineers, applying resources as necessary to achieve project objectives Other duties include ISM, EWP implementation, JHA development, pre-job briefings The DM reports directly to the PM

Figure 3-1 Building 776/777 Closure Project Chain of Command



3 7 Site Workers

Site workers comply with the task-specific HASP, JHAs, and applicable RFETS practices, procedures, and policies They are responsible for reporting any accidents, injuries, or near misses immediately to their Foreman or Supervisor They assist with development of JHAs and participate in the EWP process as required They are responsible to ensure all of their required training is current

3 8 Visitors

Visitors entering the work area during field activities will receive a briefing on the requirements of this HASP In addition, visitors must meet the training requirements for Building 776/777 access (which includes either General Employee Radiological Training or RFETS Short-Term Visitor Orientation for escorted access) Visitors must wear dosimeter and other PPE, as required by the RWP, HASP, and JHAs Normally, visitors will not perform hands-on work activities Training for visitors shall be commensurate with the areas being visited and meet the requirements of the Site RCM, Article 622 or 657

Visitors who enter any area of the activities where they may be exposed to hazards of the project must be trained on the requirements of this HASP Visitors who enter the work area or sign in under the RWP, who do not meet the minimum training requirements shall not be permitted to perform hands on work and must be escorted by a site worker who meets minimum training requirements

4 0 HAZARD ASSESSMENT

4 1 Development of an Activity Hazard Assessment/Job Hazard Analysis

For tasks that pose exposure to, with, or around potential health and safety hazards, a Job Hazard Analysis (JHA) will be developed to describe the hazards as well as the actions necessary to eliminate or mitigate those hazards This JHA will be developed through an Enhanced Work Planning session, which will include the craft involved in the work, the supervisor of that team, the Project Safety Officer or his designee if industrial hazards are present, and the Radiological Site Manager, if radiological hazards are present

The first step in this process will be to identify the hazards that exist It is important to remember that hazards other than those already known and characterized may exist For example, a team may find unexpected contamination, either radiological or chemical, while involved in closure activities Therefore, special care must be taken to ensure that all potential hazards are included in the analysis

Once the hazards are identified, the guidance documents concerning these hazards must be reviewed It is the strategy in this project to comply with all Federal, State and DOE regulations RFETS requirements that are above and beyond these Federal, State and DOE requirements will be considered for implementation If it is determined that an RFETS-imposed control is inappropriate for the task at hand (i e incorrect, overly conservative, etc) a waiver will be requested, and once approved, the project will continue At the same time the waiver is requested, a Document Modification Request will be issued for the procedure as well, to correct the issue for future projects

From these steps, the hazards and necessary mitigating actions are determined, and a JHA is written and reviewed by the team performing the work Concurrence is then obtained from the Supervisor, Project Safety Officer, and Radiological Safety Manager, or their designees The Project Safety Officer or his designee has final approval authority for JHAs

4 2 Monitoring for Hazardous Constituents

4 2 1 Chemical Hazard Monitoring

The Project Safety Officer or designee will determine the need for chemical hazard monitoring All air sampling and monitoring will be performed in accordance with approved National Institute of Occupational Safety and Health or OSHA sampling methods using either direct reading instrumentation or personal air sampling as directed by the IH&S lead or designee All instrumentation used will be calibrated in accordance with factory recommendations

4 2 2 Radiological Hazard Monitoring

Air monitoring within the work areas will be performed using portable Continuous Air Monitors (CAMs) and portable air sampling equipment The use of portable CAMs allows the project flexibility in monitoring locations, resulting in more effective monitoring Training on the use and response of these monitors will be provided to all Project personnel Personnel monitoring for radiological hazards will be identified in RWPs and the ALARA job reviews All radiological monitoring will be performed in accordance with the procedures contained in the RFETS HSP Manual, RFETS Radiological Control Manual, and the Radiological Operating Instructions (ROI)

4 3 Determining the hazards and controls

For each activity, hazards will be identified This is accomplished by completion of JHAs during the course of activity planning Per the IWCP process, job walkdowns are conducted to facilitate planning Additionally, walkdowns are used to identify the hazards associated with activity steps, and corresponding protective control measures are also identified The work teams planning the activity work closely with the Project Safety Officer and Radiological Safety Manager to ensure that appropriate controls are in place prior to work progressing

In addition to the JHA, the following will be developed for these specific hazards

- An asbestos abatement plan, which documents the controls to protect workers during asbestos abatement for D&D, will be developed
- A process to control the hazards associated with removal of beryllium contamination will be developed This process is captured in OS & IH PM Chapter 28, "Chronic Beryllium Disease Prevention Program "
- A process to control the hazards associated with unknown chemicals will be developed This process is captured in 00-776/777-103, Management of Unknown Potentially Unstable Shock-Sensitive Materials
- A process to control the hazards associated with the removal of lead will be developed This process is captured in Building 776/777 Closure Project's Lead Compliance Plan

5 0 Training Requirements

Training is an important component of safety within the Building 776/777 Closure Project In order to determine the appropriate training, key project management and support personnel reviewed the entire list of available training at RFETS, and determined a minimum set of training for project personnel, based on their job activities This minimum set of training can be either the RFETS version of the course, or an equivalent course provided by an outside organization

For personnel assigned to the Building 776/777 Closure Project at least one half time, the minimum set of training includes

- Training on the site and building alarms (i e , "Alarms, Sounds and Responses"),
- Building 776/777 Indoctrination,
- General Employee Training (GET),
- General Employee Radiological Training (GERT) (Note that Rad Worker I or II or RCT qualification satisfies this requirement),
- Training on the hazard communication program (i e , HazCom CBT and HazCom checklist),
- Beryllium CBT, and
- Briefing on this HASP

For personnel supporting the Building 776/777 Closure Project but not identified as described above, as a minimum, the Building Access Training requirements shall be met for those requiring building access

In addition to the minimum training required to support the Building 776/777 Closure Project, certain positions are identified in the RMRS Training Implementation Matrix (TIM), Rev 1, as requiring qualification in accordance with DOE Order 5480 20A These qualification requirements are to be met for these individuals to perform their functions A task analysis was utilized to develop qualification documents for CCA and SOE positions

D&D workers requirements for initial qualification were developed by Needs Assessment Their successful initial qualification serves as a "starting point" Their demonstration of competency to conduct work to procedures will be traced via performance checklists

As the Project proceeds, it will be necessary to train and qualify new D&D workers These workers will be allowed to work in contaminated areas (including highly contaminated areas and PreMaire) under the instruction and supervision of a qualified supervisor These trainees are to be under the direct supervision of the qualified supervisor, with the qualified supervisor in a position to intervene or assume control should the need arise These workers will be required to meet the minimum training specified, the job specific work instructions and JHA, as well as the following

- Training on the site and building alarms (i e , "Alarms, Sound sand Responses"),
- Building 776/777 Indoctrination,
- General Employee Training (GET),
- Rad Worker II,
- A briefing on this HASP,
- Beryllium CBT, and
- 40 hour OSHA training

When these workers complete all the requirements specified as part of their qualification, they will no longer be required to work under the instruction and supervision of a qualified supervisor

In addition to TIM training requirements, other courses may be identified as potentially required to perform specific scopes of work or tasks To determine if additional training is required, a review will be performed of the training necessary for safe performance prior to each task, during the creation of the JHA Any training, which is in addition to the minimum set of training, will be identified on the JHA form and must be completed prior to starting the activity

Additional training, in the form of JHA briefings, pre-job briefings, "tool-box" safety training, regular safety meetings or continuing training may be required The purpose of these briefings is, in part, to ensure that hazard mitigation occurs by training to the hazards identified Briefings shall also be conducted whenever this HASP is technically revised and where those revision impact field conditions, when new JHAs are developed or revised due to work conditions changing

As new training requirements are identified at RFETS, the Technical Support Manager, with the Training Department, will review the requirement against the work being performed in this project

6 0 PERSONAL PROTECTIVE EQUIPMENT (PPE) PROGRAM

PPE for the project will be selected by an IH&S personnel for the specific hazards to be encountered Workers will be trained in the use, maintenance, and disposal of the PPE assigned to them in accordance with 29 CFR 1910 132 and the RFETS respiratory protection program

As job conditions dictate, the Project Safety Officer will evaluate the specific PPE for that particular task(s) This may involve the use of level A, level B, level C, or level D PPE When prescribing PPE, the following factors will be considered

- Permeability, degradability, penetrability by specific agents expected for the job task(s)
- Heat/cold (thermal effects)
- Durability
- Flexibility
- Ease of decontamination
- Compatibility with other equipment

- Special conditions (fire, explosive, electrical, chemical, radiological, O_2 deficient atmospheres etc)

At a minimum, personnel performing D&D activities shall wear the following personnel protective equipment

- Safety Glasses with Side Shields,
- Hard Hats (in posted hard hat areas),
- Safety Shoes with ankle protection,
- Appropriate work clothes, and
- Additional PPE as prescribed by the RWP and JHA

7 0 MEDICAL SURVEILLANCE

Project personnel who are or may be exposed to hazardous substances or health hazards will receive hazardous waste worker medical surveillance as specified below

Exposure to	Medical Surveillance Required
Lead	Baseline blood test for lead and zinc protoporphyrin, in accordance with 29 CFR 1926 62
Beryllium	Evaluated for inclusion in the Be medical surveillance program per OS&IHPM, Chap 28
Asbestos	Medical monitoring requirements as defined in 29 CFR 1926 1101 and the site-specific Health And Safety Manual, (HSP-9 09)
Haz Waste Worker	Medical monitoring requirements as defined in 29 CFR1926 65
Nuclear Worker	Medical monitoring requirements as defined in DOE 5480 8A

8 0 SITE CONTROL MEASURES

8 1 Site Communications

Project personnel will have access to telephones and/or radios located in the immediate area Emergency information will be communicated to the Building 776/777 Cluster by way of the Life Safety/Disaster Warning (LS/DW) system or radio communication once LS/DW System is removed, (reference Figure 8-1 to view a map of the Building 776/777 Cluster layout)

8 2 Work Zones

The project site will be posted as a work area and access to the area will be limited to those personnel working on the project Additional work zones such as regulated areas for lead, asbestos, beryllium, and radiological hazards will be established in accordance with the applicable requirements and will be indicated in the JHAs Building 776/777 Surveillance and Maintenance personnel will require access due to ongoing activities, however, they will be required to comply with the applicable portions of this HASP and the associated JHAs Operations and Maintenance personnel shall be briefed on the HASP and sign in on the briefing form

8 3 Housekeeping

During the decommissioning process of the Building 776/777 Cluster, housekeeping will be of utmost importance OSHA Standard 29 CFR 1926 25 will be utilized as the minimum standards for housekeeping

8 4 Site Security

The Building 776/777 Cluster is in a controlled access area Entry into the Building 776/777 Cluster is limited to personnel requiring access for routine operations, maintenance, and performing activities addressed by this plan Personnel requiring access must have completed the required training, medical surveillance, and wearing the prescribed PPE, as well as signed-in on the RWP and JHA, as applicable

8 5 Sanitation

Sanitation facilities, potable water, and change locations will be available and located in close proximity of work areas, and ensure compliance with 29 CFR 1926 51

9 0 DECONTAMINATION PROCEDURES

Specific decontamination procedures, as applicable and depending on the hazard, will be addressed in the site RadCon Manual, the Site Health and Safety Practices Manual, and this HASP

Hazard	Decontamination Regulation
RADIOLOGICAL	Decontamination for potential radiological contamination will be performed in accordance with the applicable procedures in the HSP Manual and Radiological Operating Instructions Manual and as specified in the RWP
LEAD	Decontamination of lead will be performed in accordance with 29 CFR 1926 62 (g), (h), (i), and project-specific Lead Compliance Plans
ASBESTOS	Removal of ACM will be performed in accordance with 29 CFR 1926 1101, Environmental Protection Agency 40 CFR 763 and the HSP Manual, and OS&IHPM
BERYLLIUM (Be)	Decontamination for Be will be performed in accordance with the RFETS OS&IHPM, Chapter 28)

10 0 EMERGENCY RESPONSE

10 1 Pre-Emergency Planning

All field project personnel will be informed of the emergency response procedures contained in this plan and the site-specific Building 776/777 Closure Project Emergency Response Operations Procedure Plan, (3-PRO-032-BERO-14 776/777) Building 776/777 Closure Project management will be aware of project activities by way of the Building 776/777 Plan-of-the-Day meeting

10 2 Communication

In the event of an incident requiring emergency response, personnel shall call extension 2911 by telephone Also, personnel shall report emergencies to the Building 776/777 Closure Project Configuration Control Authority and the Project Manager These personnel can be reached via phone, radio and pager communications, using the facility call list

10 3 Safe Distances and Places of Refuge

In the event of an incident requiring emergency evacuation of the facility, all personnel will evacuate, follow LS/DW or radio instructions and assemble at the designated Buildings 776/777 assembly areas All alarms and response procedures shall be followed in Buildings 776/777 and supporting facilities

10 4 Evacuation Routes

Evacuation routes are posted at various locations within the building(s) and project personnel will be informed of the routes during pre-evolution briefings

10 5 Emergency Medical Treatment and First Aid

Emergency medical assistance can be obtained by calling extension 2911 by phone Site Emergency Response personnel will determine if off-site medical transportation and assistance is required Individuals requiring non-emergency medical treatment or first aid will be transported to the Occupational Health Clinic, Building 122 for treatment The Configuration Control Authority and the Project Manager shall be immediately notified of any such incidents

10 6 PPE and Emergency Equipment

The project will maintain available the PPE necessary to perform work as outlined in the JHA In addition, fire extinguishers will be available at the project site The RFETS Fire Department and HazMat Team maintains a supply of additional emergency equipment

11 0 POST CONSTRUCTION ACTIVITIES

The Project Manager shall prepare a final report detailing the safety and health performance during the construction activity or project The final report shall be in the form of self-assessment and will evaluate the safety and health performance of all subcontractors, lower-tier subcontractors, and vendors

The final report shall include the following

- Copy of the Daily Log maintained by the Project Safety Officer,
- Copies of all accident and incident investigation reports,
- Total number of first-aid cases incurred,
- Total number of Radiological Deficiency Reports,
- Copies of he OSHA 200 Logs for the Project and all subcontractor personnel,
- Final totals of employee hours worked for the Project and all subcontractor personnel, and
- Copies of all OSHA, DOE, and RFETS safety and health training records, safety meeting reports, and attendance rosters associated with the performance of the construction project or activity

12 0 MANAGEMENT ASSESSMENTS

It is important to perform periodic assessments on the activities being conducted to determine adherence to applicable requirements and implementation of best management practices The Management Assessment Program (MAP) is the tool to be used to perform such assessments for this project The MAP identifies and documents findings, observations, and noteworthy practices, initiates required corrective actions, and report the effectiveness, adequacy, efficiency, and economy of programs, activities, and processes to the appropriate level of management

Assessments shall be based on a graded approach commensurate with

- The relative importance or risk to safety, safeguards, security, and the environment,
- The magnitude of any hazard involved,
- The life cycle stage of the facility,
- The programmatic mission of the facility,
- The particular characteristics of the facility, and
- Any other relevant factor

The performance of MAP assessments is not restricted to those personnel who have an organizational title of manager or supervisor but may include others, such as leads, subject matter experts, etc However, all assessments will be reviewed by key management personnel to ensure management involvement in determining deficiencies and corrective actions

The RMRS Management Assessment Program dictates the assessments scheduled to be performed during this project The Technical Support Manger will hold the master list This list may be modified by the Project Manager, as appropriate, to support the overall goals and objectives of the project

13.0 RECORD KEEPING REQUIREMENTS

The following records shall be maintained as part of the Project File for this project

- Occurrences shall be reported via the current RFETS Occurrence Reporting procedure Lessons learned from previous occurrences, both at RFETS, as well as from other sites, shall be shared with the project team during safety meetings Minutes of Manager's Meetings for occurrences shall be kept in the Project File

- Any individual experiencing an injury or illness shall report to the Occupational Health department for evaluation

- All accident and incident investigation reports shall be completed as required by the Health & Safety Practices Manual

  Note RFETS requires that all occupational injuries or illnesses, motor vehicle accidents resulting in more than $500 00 damage, personal injury, property damage incidents, or fires resulting in $1,000 00 or more in damage be investigated and reported

- A properly completed Individual Accident/Incident Report shall be submitted to Project Manager within 24 hours of the accident or incident and a copy maintained in the Project File

- The following information shall be provided to the Project Manager by the third working day of each month or at the completion of the construction activity, whichever comes first A copy of these reports shall be filed in the Project File

  1 Requested information pertinent to first-aid cases
  2 Employee hours worked
  3 OSHA incidence rates for the project in progress or completed

- The same statistical information shall be submitted for any construction subcontractor, lower-tier subcontractor, and vendor who have performed work on the project A copy of the information provided shall be filed in the Project File

- Any subcontractor performing construction at RFETS shall maintain and make available for review an up-to-date OSHA 200 Log pertinent to construction activities at RFETS

    - The following records shall be maintained for subcontractors, lower-tier subcontractors, and vendors during the performance of the project Copies of these records shall be provided to the Project File

        1 First aid cases
        2 Employee hours worked
        3 OSHA 200 Logs
        4 OSHA incident
        5 Minutes of Manager's Reviews

- All Sampling Data from Beryllium and Asbestos smear sampling and air sampling shall be kept in the IH&S files for turnover to the Closure Project File Also data from sampling lead, paint, oils, chemicals, PCBs, and other heavy metals shall be kept in the Project File This sampling data shall be maintained in such a way that chain of custody and location of samples is easily identifiable and accurate